

ICHTHYOLOGY.—*Distributional records for North American fishes, with nomenclatorial notes on the genus Psenes.*<sup>1</sup> ROBERT R. MILLER, U. S. National Museum.

In reducing the extensive backlog of unidentified fishes in the U. S. National Museum during the past year and a half, species were found that ranged beyond the published limits of their distribution, or, constituting rare records, seemed worth while for publication. The list, including fresh-water and marine species, treats the fresh-water forms first, and both groups are arranged in systematic sequence. Introduced as well as endemic species are included.

FRESH-WATER FISHES

CATOSTOMIDAE

*Thoburnia rathoeca* (Thoburn)

This aberrant sucker was regarded by Hubbs (1930, pp. 43-45) as confined to the James River System, Virginia. Later Schultz (1939, p. 55, fig. 56) recorded it from the headwaters of the Mayo River, a tributary of the Roanoke River, also in Virginia. On the basis of collections made in Virginia in the summer of 1885 by Marshall McDonald, later U. S. Commissioner of Fishes, the known range of *Thoburnia* is now definitely extended to include the Kanawha and Potomac River drainages. Specimens of *T. rathoeca* had, however, previously been assigned to the Kanawha (see Hubbs, 1930, p. 44) but the record was doubted by Hubbs who failed to take the species in that system. Later Hubbs and Raney (1944, p. 12) doubtfully included it in the Kanawha Basin.

The data for the specimens from the Kanawha Basin are as follows: U.S.N.M. no. 39529, 3 adults from Wolf's [= Wolf] Creek, Giles County, Va., collected in the summer of 1885 by McDonald. Wolf Creek enters the New River about 10 miles above the Virginia-West Virginia boundary line.

The record for the Potomac drainage is based on a single half-grown specimen (U.S.N.M. no. 132071) from War Branch, tributary to Dry River, near Rawley Springs, Rockingham County, Va., collected by

McDonald in the summer of 1885; original number 137. Dry River is a tributary of the North Fork of the Shenandoah River. In addition to this definite record, there is a possibility that 12 yearling to adult *Thoburnia* (U.S.N.M. no. 131125) from "Waynesborough and vicinity," original number 20, collected by McDonald in 1885, also represent material from the Potomac drainage. Waynesboro is on the South Fork of the Shenandoah River in Augusta County, Va.

CYPRINIDAE

*Agosia chrysoaster* Girard

In the United States the genus *Agosia* (restricted to *Agosia chrysoaster* Girard, thus far the only known species of the genus) has not been recorded north of the Gila River Basin of southern Arizona, from which drainage it ranges southward into Sonora, Mexico. Its occurrence in Big Sandy River in Mohave County, Ariz., a tributary of Williams River, Colorado River Basin, is therefore of considerable interest. Fourteen young to small adults, U.S.N.M. no. 131685, were collected by Frank Stephens in Big Sandy Creek [= River] on July 17, 1902. That "Big Sandy Creek" is the same as what is now called Big Sandy River is proved by Stephens's account of his travels in 1902 (Condor 5: 75); for this reference I am grateful to Lawrence M. Huey, of the Natural History Museum, Balboa Park, San Diego, Calif. Although the identification to genus is without question (teeth 4-4; scale with radii on all fields; maxillary with a barbel; anal elongate, with 7 rays; mouth small, subterminal, nearly horizontal), the specific allocation is uncertain, for the specimens are mostly small and poorly preserved. Except for a few channel forms and *Plagopterus argentissimus* Cope, the fish fauna of the Gila River (including the Colorado below the Gila) is remarkably unlike that of the vast remainder of the Colorado River Basin.

*Hesperoleucus mitrulus* Snyder

The most recent account of the distribution of this species (Schultz and DeLacy, 1935,

<sup>1</sup> Published by permission of the Secretary, Smithsonian Institution. Received February 15, 1946.

p. 379) gave the range as streams tributary to the north end of Goose Lake, Lake County, Oreg. It has been known for several years, however, that *mitrulus* is one of the distinctive elements of the upper Pit River fauna (Sacramento System), to which Goose Lake was tributary in historic times, for several collections of this species from the vicinity of Likely and Alturas, Modoc County, Calif., are preserved at the University of Michigan. The lowermost record in the Pit River for *mitrulus* is based on two adults, U.S.N.M. no. 132089, collected by the late J. O. Snyder in Big Valley, just north of Bieber, Lassen County, Calif. The small fins (dorsal 8, anal 7) and the presence of radii on all fields of the scales have been used to distinguish *mitrulus*, but similar characters occur in some headwater populations of *symmetricus* on the west slope of the Sierra Nevada and these two species may eventually be found to intergrade.

#### *Rhinichthys osculus* (Girard)

Now that *Apocope* is relegated to the synonymy of *Rhinichthys* (Hubbs, 1940, p. 200), where Gilbert (1893, p. 229) properly placed it years ago, the genus *Rhinichthys* comprises one of the commonest elements of the western fresh-water fish fauna. With few exceptions, the western members have lately been regarded by Hubbs and others as forming a widespread species, *R. osculus*. In examining the types of *Argyreus osculus* (U.S.N.M. no. 50), I find that in two of the three specimens there is a definite, though weak, frenum; thus at least five forms of *R. osculus* (subgenus *Apocope*) are now known with this structure varyingly developed (always strongly developed in the subgenus *Rhinichthys*).

Although this species is known from streams of the Pacific coast as far south as the Santa Ana River drainage (Culver and Hubbs, 1917, p. 83, as *Agosia nubila carringtonii*), it heretofore has not been recorded from the Santa Clara River Basin, just to the north. Neither is it known to occur in the Ventura or Santa Ynez Rivers, the next drainages northward, but it has been taken recently (by R. G. and R. R. Miller in 1940; material at the University of Michigan) in the Cuyama River Basin, next to the north.

On October 14, 1945, 388 young to adult (U.S.N.M. no. 132342) were seined by R. G.

Miller and Larry Gianettoni, about 12 miles up Elizabeth Lake Canyon from U. S. Highway 99, and 144 young to adult (U.S.N.M. no. 132346) were collected in Castaic Creek, 5½ miles up from the same highway; both localities are in Los Angeles County, north of Saugus. The stream in Elizabeth Lake Canyon, to which Castaic Creek is tributary, joins the Santa Clara River during floods just below Newhall Ranch, or about 4 miles upstream from the Los Angeles-Ventura County line. In addition, four adults were seined by the same collectors in the Santa Clara River between U. S. Highway 99 and the railroad bridge a short distance upstream, Los Angeles County, on October 21, 1945; U.S.N.M. no. 132351. Despite the fact that the streams of the Santa Clara River Basin have been collected rather thoroughly in habitats that appear to be well suited to *Rhinichthys* below the Los Angeles-Ventura County line during the past decade, and also in the main river from that point to its source region, no *Rhinichthys* were found heretofore. The possibility that the species was introduced as bait by trout fishermen must therefore be seriously considered. However, the absence of this genus in previous collections from the Santa Clara Basin is not logically explained, for the other two fresh-water fishes of southern California, the sucker *Pantoseus santa-anae* Snyder and the minnow *Gila orcuttii* Eigenmann and Eigenmann, are abundant there.

#### *Chrosomus oreas* Cope

Dr. Leonard P. Schultz has kindly called my attention to what appears to be the first collection of this species from the New River in western Virginia. It is based on U.S.N.M. no. 107582, 12 specimens 36.5 to 54 mm. in standard length, collected by L. P. Schultz and E. D. Reid on July 16, 1938, in Little River and Sugar Run (tributaries to New River, Kanawha system) above Snowville, Pulaski County, Va. Examination of preliminary counts and measurements made by Dr. Schultz on this material and three other collections in the Roanoke River system (from which the species was described) indicates that the New River sample is very slightly finer-scaled. Raney (in Hubbs and Raney, 1944, p. 12) also took this species in the Kanawha system, and it is known elsewhere from the headwaters of the James and Roanoke Rivers, Va.

## AMEIURIDAE

*Ameiurus natalis* (LeSueur)

In a recent account of exotic fishes in the Pacific Northwest, Chapman (1942, pp. 12-13) listed only *Ameiurus nebulosus* and *Ameiurus melas*. A third introduced species, the yellow bullhead or catfish, *Ameiurus natalis*, is now recorded for the first time from Oregon. The record is based on an adult, U.S.N.M. no. 108817, from McBee Lake, Benton County, collected by Stuart J. Couper. The letter by Mr. Couper transmitting this specimen was written on February 24, 1939, but no date of collection was given. It agrees well with the diagnosis of *A. natalis* by Hubbs and Lagler (1941, p. 62) for it has 25 anal rays, a broadly rounded caudal fin, and whitish mental barbels. The yellow bullhead was not mentioned in the papers covering Oregon fishes by Schultz and DeLacy (1935), Schultz (1938), or Griffiths (1940).

## MARINE FISHES

## NOMEIDAE

*Psenes regulus* Poey

Since widespread distribution is characteristic of oceanic fishes, it is therefore not surprising that this species, previously known north of the coasts of Cuba only by a single record from off Beaufort, N. C. (Smith, 1907, p. 223), is represented by four small to large adults taken off North and South Carolina. The data for these specimens, all collected by the *Albatross*, is as follows: 2 small to large adults, U.S.N.M. no. 132237, station 2603, lat. 34°38'30" N., long. 75°33'30" W., taken at the surface approximately 55 miles east of Cape Lookout, N. C., on October 18, 1885; 1 adult, U.S.N.M. no. 131629, station 2626, lat. 32°27'30" N., long. 77°20'30" W., collected approximately 155 miles east of Charleston, S. C., on October 21, 1885; 1 adult, U.S.N.M. no. 39329, station 2628, lat. 32°24'00" N., long. 76°55'30" W., collected about 175 miles east of Charleston on the same date. U.S.N.M. no. 131629 was taken over a depth of 353 fathoms and U.S.N.M. no. 39329 over a depth of 528 fathoms. The large beam trawl used by the *Albatross* to collect these specimens had no closing device and therefore fished from the bottom to the surface. *P. regulus* is obviously

not a deep-water fish and was evidently taken by the trawl at or near the surface, as were the two specimens represented by U.S.N.M. no. 132237.

In all four, the dorsal rays are XI, I, 15 and the anal rays III, 15 and there are about 50 to 55 scales in the lateral line; the large round to oblong dark spots, well portrayed by Goode and Bean (1895, fig. 229), and the shape and proportions of the body and its parts agree very well with the original description of *regulus* by Poey.

No one seems to have noticed that Goode and Bean (1895, p. 221, fig. 229, pl. 63) recorded this species under the name *P. maculatus*, based on the third specimen listed above (U.S.N.M. no. 39329). Not only was this fish misidentified by them but also their records for both *P. pellucidus* and *P. "maculatus"* are confused and erroneous. The specimen they credit (in paragraph 3, p. 221) to the account of *pellucidus* is actually the fish referred by them to *maculatus*, for the longitude, latitude, and depth are precisely as given for U.S.N.M. no. 39329, on which figure 229 was based (original drawing in files of Division of Fishes). The data given in paragraph 4, "N. lat. 27°49', W. long. 76°12', over a depth of 633 fathoms," obviously were meant to go with the account of *pellucidus* and to apply to figure 228, not to figure 229. In addition, however, these data are almost surely erroneous, for figure 228 was based on U.S.N.M. no. 35415, station 2171, lat. 37°59'30" N., long. 73°48'40" W., collected at the surface by the *Albatross* on July 20, 1884. Unfortunately, this specimen was discarded some years ago, but the catalogue book, the data on the original drawing, and the index card all agree on this location and disagree with the one given by Goode and Bean.

*Psenes pellucidus* Lütken

The type locality of this species seems to have been generally overlooked or misinterpreted.<sup>2</sup> It was described by Lütken (1880, p. 516, 1 fig.) from the Straits of Surabaja, Java, hence in the Indo-Pacific (not the At-

<sup>2</sup> Fowler (1936, p. 664, footnote) pointed out the correct type locality under the account of *P. maculatus* (note that his figure 298 is really of *P. regulus* for it was based on figure 229 of Goode and Bean).

TABLE 1.—VARIATION IN DORSAL FIN RAYS IN SPECIES OF PSENES<sup>1</sup>

Species	Dorsal spines				Dorsal soft rays										No.			
	IX, I	X, I	XI, I	XII, I	22	23	24	25	26	27	28	29	30	31		32	33	
<i>pellucidus</i> .....	—	—	—	1 <sup>2</sup>	—	—	—	—	—	—	—	—	—	—	—	—	1 <sup>2</sup>	1
" <i>pellucidus</i> " <sup>3</sup> .....	—	—	—	14	—	—	—	—	—	—	—	1	9	3	1	—	—	14
<i>edwardsii</i> .....	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	1
<i>cyanophrys</i> <sup>4</sup> .....	4	2	—	—	—	—	—	1	1	3	1	—	—	—	—	—	—	6
<i>pacificus</i> <sup>5</sup> .....	3	—	—	—	—	—	—	?	2	?	—	—	—	—	—	—	—	3
<i>chapmani</i> <sup>6</sup> .....	—	X	—	—	X	X	—	—	—	—	—	—	—	—	—	—	—	7?
" <i>maculatus</i> ".....	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	2

<sup>1</sup> The dorsal fin formula for *P. regulus* Poey is XI, I, 15.

<sup>2</sup> Lütken did not differentiate between spines and soft rays, merely stating that the first dorsal had 12 rays, the second dorsal 34; I assume the 12 rays are spines and that there is one spine in the second dorsal, leaving 33 soft rays. Regan (1902, p. 125) wrote the formula as XI, I, 34.

<sup>3</sup> American material, North Atlantic; perhaps distinct from true *pellucidus* (Indo-Pacific; see text).

<sup>4</sup> Including count by Hubbs (1929, p. 36) of IX, I, 25.

<sup>5</sup> Meek and Hildebrand (1925, p. 409) wrote that the soft dorsal rays of *pacificus* varied from 26 to 28. On reexamining the three types (U.S.N.M. nos. 82196-97) I count 27 in two, but the rays are broken in the third specimen which may have had 26 or 28.

<sup>6</sup> Fowler (1906, p. 119) did not indicate how many specimens were counted or what the individual frequencies were.

lantic).<sup>3</sup> The American form, also pellucid, which has been passing under the name *pellucidus*, may really be distinct from the Indo-Pacific species. If so, the name *edwardsii* may be available for it, since it is doubtful if Eigenmann's species is distinct from American "*pellucidus*" (Tables 1 and 2). With the insufficient material at my disposal (particularly the lack of Indo-Pacific specimens) it is probably best to continue recognizing *pellucidus* and *edwardsii* as currently understood. A revision of *Psenes* and its close allies is obviously needed. The grouping shown in Tables 1 and 2 seems to give interesting leads toward such a study.

The groups may be briefly and tentatively characterized as: (1) *pellucidus*-group, with an increased number of fin rays, very fine scales (about 120-140), and transparent body; (2) *cyanophrys*-group, with an intermediate number of fin rays and large scales (about 50-65); and (3) "*maculatus*"-group, with few fin rays and large scales (about as in *cyanophrys*-group). *Psenes regulus* is so different in coloration and fin-ray number that it is evidently not very closely related to any of the above.

The records for *P. "pellucidus,"* all based on collections taken by the *Albatross*, are as follows: U.S.N.M. no. 83793, 3 young to half-grown, station 2711, lat. 38°59'00" N., long.

70°07'00" W., September 16, 1886, about 265 miles east of Cape May, N. J.; U.S.N.M. no. 83795, 1 young, station 2102, lat. 38°44'00" N., long. 72°38'00" W., November 5, 1883, about 125 miles east of Cape Henlopen, Del.; U.S.N.M. no. 83794, 1 young, station 2742, lat. 37°46'30" N., long. 73°56'30" W., September 17, 1887, about 85 miles east of the peninsula of Maryland; U.S.N.M. no. 38172, 4 half-grown, station 2724, lat. 36°47'00" N., long. 73°25'00" W., October 23, 1886, about 150 miles east of Cape Henry, Va.; U.S.N.M. no. 38192, 4 young to adult, station 2731, lat. 36°45'00" N., long. 74°28'00" W., October 25, 1886, about 95 miles east of Cape Henry, Va., U.S.N.M.

TABLE 2.—VARIATION IN ANAL RAYS IN SPECIES OF PSENES<sup>1</sup>

Species	Number of anal soft rays										No.	
	22	23	24	25	26	27	28	29	30	31		32
<i>pellucidus</i> <sup>2</sup> .....	—	—	—	—	—	—	—	—	—	1	—	1
" <i>pellucidus</i> " <sup>3</sup> .....	—	—	—	—	—	—	—	—	3	7	3	1
<i>edwardsii</i> .....	—	—	—	—	—	—	—	—	—	1	—	—
<i>cyanophrys</i> <sup>4</sup> .....	—	—	—	—	4	1	1	—	—	—	—	—
<i>pacificus</i> .....	—	—	—	—	1	2	—	—	—	—	—	—
<i>chapmani</i> .....	—	X	X	X	—	—	—	—	7 <sup>5</sup>	—	—	—
" <i>maculatus</i> ".....	2	1	—	—	—	—	—	—	—	—	—	—

<sup>1</sup> In all material examined by me the anal fin was preceded by three spines; this agrees with published accounts. In *P. regulus* the anal fin formula is III, 15.

<sup>2</sup> Despite the fact that Lütken clearly indicated the anal fin formula (3.31), this has been repeatedly written as III, 34.

<sup>3</sup> American material, North Atlantic; perhaps distinct from true *pellucidus* (Indo-Pacific; see text).

<sup>4</sup> Including count by Hubbs (1929, p. 36), of III, 26.

<sup>5</sup> Note that Fowler (1906, p. 121) in his description of *chapmani* wrote, "Larger example with 28 rays." I assume he was speaking of anal rays.

<sup>3</sup> I am greatly indebted to Dr. Adam Bøving, associate in zoology, U. S. National Museum, for translating Lütken's account of *P. pellucidus* and *P. maculatus*.

no. 131524, 1 half-grown, station 2402, lat. 28°36'00" N., long. 85°33'30" W., March 14, 1885, in the Gulf of Mexico about 80 miles south of Cape San Blas, Fla.

#### *Psenes maculatus* Lütken

The common application of this name to the Atlantic *Psenes*, which has few (usually 22 or 23) soft rays in both dorsal and anal fins, must now be seriously questioned. Lütken clearly indicated (1880, p. 519) that his species (or at least the largest specimen he described) has teeth on the palatine bones and at least a single tooth on the vomer. According to current ideas, the genus *Psenes* is distinguished from *Nomeus* and *Cubiceps* by lacking teeth on both the palatine bones and the vomer. Lütken strongly suspected that his "*Psenes maculatus*" was really the young stage of a *Cubiceps*, but Collett (1896, p. 31) insisted that this interpretation was wrong, although he seems to have overlooked or ignored the palatine and vomerine dentition. I have not observed palatine (or vomerine) teeth in the few specimens representing six or more species of *Psenes* I have examined (Tables 1 and 2); neither have I seen in *Psenes* a body form as slender as that portrayed by Lütken (1880, pl. 5, fig. 2) for his largest specimen (94 mm., total length). On the basis of these data it seems highly improbable that Lütken's *maculatus* belongs to the genus *Psenes*. Without a revisionary study and a more thorough search of the literature than I have made, I do not think it wise to substitute a new specific name for what has been passing as *Psenes maculatus*. There is a good chance that a name may already be available. I therefore refer to the species in my tables as "*maculatus*."

The data for the National Museum material of "*maculatus*" are as follows: 2 young (identity uncertain) and 1 adult, U.S.N.M. no. 83792, station 2711, lat. 38°59'00" N., long. 70°07'00" W., taken in the open Atlantic directly east of Cape May, N. J. and south of Nantucket Island, Mass., by the *Albatross* on September 16, 1886; 1 young, U.S.N.M. no. 131517, station 2223, lat. 37°48'30" N., long. 69°43'30" W., collected by the *Albatross* in the open Atlantic east of Delaware and south of Nantucket Island, on September 7, 1884; and 1 young, U.S.N.M. no. 126652, from "sar-

gasso weed" in the open Atlantic east of the West Indies, lat. 21° N., long. 51° W., collected by Dr. C. C. Craft on the yacht *Carnegie*.

#### *Psenes cyanophrys* Cuvier and Valenciennes

Hubbs (1929, pp. 34-36) added this species to the known fauna of continental United States, but I am not aware of any other published records of *P. cyanophrys* from our North Atlantic coast. The following northernmost American record of this species is therefore of interest: 1 large adult (117 mm., standard length), U.S.N.M. no. 64120, seined at No Man's Land, an island just south of the western tip of Martha's Vineyard, Mass., by Vinal N. Edwards in 1904. The distinctive coloration of *cyanophrys*—longitudinal, lighter streaks between the scale rows following the outline of the gently arched lateral line above but running horizontally below the lateral line—is well developed in this specimen, and it agrees well in other characters with current definitions of *cyanophrys*.

#### GADIDAE

#### *Urophycis chesteri* (Goode and Bean)

Until recently this deep-water species has been regarded as ranging from the Gulf of St. Lawrence southward to off Cape Lookout, N. C. Dr. William H. Longley listed 29 specimens from Tortugas, Fla. (*in* Longley and Hildebrand, 1941, p. 38), but these specimens have not been found, and hence their identity can not now be verified.

The southernmost record based on material available for examination appears to be an adult (U.S.N.M. no. 132240) 207 mm. in standard length, collected by the *Albatross* at station 2674, lat. 32°32'00" N., long. 77°17'00" W., in the open Atlantic approximately 165 miles east of Charleston, S. C., over a depth of 316 fathoms, on May 6, 1886. The specimen shows the characteristics of this species: a much-prolonged third dorsal filament, the depressed length of which (measured from origin of first dorsal) enters about 2.2 times in the standard length; very elongated pelvic fins, the length of the right fin entering the standard length 1.6 times; and approximately 90 scales crossing the lateral line, but as all the scales are rubbed off an accurate

count is not possible. There are about 14 or 15 gill rakers, and the short chin barbel enters about  $2\frac{1}{2}$  times in the length of the orbit. The fin rays are: Dorsal 9+59, Anal 50 or 51.

#### *Urophycis regius* (Walbaum)

The spotted ling, *Urophycis regius*, has until lately been known to occur from Nova Scotia to South Carolina (Hildebrand and Cable, 1938, p. 612). However, Dr. W. H. Longley secured 19 specimens in 60 to 283 fathoms off Tortugas, Fla. (Longley and Hildebrand, 1941, pp. 37-38). None of these specimens have been found, but the occurrence of *U. regius* as far south as Florida is now fully substantiated by specimens in the U. S. National Museum. The southern records comprise the following: 1, U.S.N.M. no. 89528, from Savannah Harbor, Ga., collected by Ivan R. Tomkins on February 22, 1930; 2, U.S.N.M. no. 89690, same place and collector, June 1930; 1, U.S.N.M. no. 59028, from Tybee Roads, near Savannah, Ga., collected by the *Fish Hawk* in 1891; 3, U.S.N.M. no. 91438, 16 miles off Sapelo Island lighthouse, about 40 miles south of Savannah, Ga., collected by the *Fish Hawk*, station 8259, on May 3, 1915; 3, U.S.N.M. no. 131251,  $\frac{1}{2}$  mile off Sea Island, near Brunswick, Ga., taken by Raymond E. and Bette Johnson in a shrimp trawl, at 2 to 4 meters depth, on March 17, 1945; 28, U.S.N.M. no. 127461, St. Simon Sound, near Brunswick, Ga., collected by W. W. Anderson on November 21, 1930; 2, U.S.N.M. no. 116725, off Fernandina, Fla., on shrimp grounds, taken by DeSmidt on November 8, 1918 (in very poor condition; identification not positive); 1, U.S.N.M. no. 73012, in Gulf Stream off Cape Florida, Fla., 4 miles northeast by east of Fowey Rock Light, over a depth of 156 fathoms, *Fish Hawk* station 7518, March 30, 1903; 1, U.S.N.M. no. 73011, Gulf Stream off Key West, Fla., Station 7279, lat.  $24^{\circ}21'55''$  N., long.  $81^{\circ}58'25''$  W., over a depth of 98 fathoms, collected by the *Fish Hawk* on February 14, 1902.

In the short chin barbel (as short as or shorter than pupil), head not notably depressed (depth about equal to width), moderate scales (less than 100), few rays in first dorsal (usually 8 or 9), and in coloration, these specimens agree very well with the diagnosis by Hildebrand and Cable (1938, p. 613).

#### *Urophycis floridanus* (Bean and Dresel)

The known range of the Florida ling, *Urophycis floridanus*, was given by Hildebrand and Cable (1938, p. 612) as Beaufort, N. C., to Pensacola, Fla. (the type locality). It is not surprising that this range is now extended to Galveston, Tex., on the basis of the following: 1, U.S.N.M. no. 131191, one mile south of Timbalier Island (south of New Orleans), La., taken in a shrimp trawl at a depth of 5 fathoms by Horace L. Whitten, February 5, 1945; 2, U.S.N.M. no. 120087, from Galveston, Tex., taken in a shrimp trawl by J. L. Baughman (specimens received from shrimp fishermen) in 1941.

These specimens are in complete agreement with the diagnostic characters of this species as cited by Hildebrand and Cable (1938, p. 613): Chin barbel always longer than pupil; scales in 110 to 130 oblique series above lateral line; dorsal 12 or 13+54 to 59; anal rays 40 to 49; lateral line in a black streak interrupted by pale spots; first dorsal dusky or black (especially distally), but not margined with white as in *regius*.

#### SCOPHTHALMIDAE<sup>4</sup>

According to Norman (1934, p. 270) South Carolina is the southern limit of the known range of the windowpane, *Scophthalmus aquosus* (Mitchill), long known under the name *Lophopsetta maculata*. The following lots of this easily recognized species are from Georgia: 2, U.S.N.M. no. 131253, taken in a shrimp trawl at 2 to 4 meters  $\frac{1}{2}$  mile off Sea Island, near Brunswick, by Raymond E. and Bette Johnson on March 17, 1945; 2, U.S.N.M. no. 119251, collected in St. Simon Sound, near Brunswick, on October 12, 1930; and 2, U.S.N.M. no. 127496, taken at Brunswick in 1930. The last two collections were made by W. W. Anderson.

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<sup>4</sup> I follow Hubbs and Hubbs (1945, pp. 244, 248) and Hubbs (1945, pp. 7-8, fig. 1) in giving this group of North Atlantic flatfishes family ranking.

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